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## **How academic librarians experience evidence based practice: a grounded theory model.**

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### **Abstract**

This study explored academic librarians' experience of evidence-based practice. A better understanding of evidence-based practice from an empirical basis can help fulfill the aims of evidence-based library and information practice to continuously improve practice and make effective, value-adding decisions about library and information services for their clients and communities. This research uses a constructivist grounded theory approach to investigate the question: How do academic librarians experience evidence-based practice? Thirteen Australian academic librarians participated in semi-structured interviews. The study used the methods of constant comparison to create codes and categories towards constructing a new theoretical model of experiencing evidence-based practice in the academic library context. The model consists of six categories of experiences: empowering, intuiting, affirming, connecting, noticing and impacting. This model can provide a platform for developing support for academic librarians and their educators by increasing awareness of various mindsets and actions experienced in the workplace context towards facilitating evidence-based information practice.

### **1. Introduction**

For almost twenty years, evidence-based practice (EBP) has been a topic of discussion among professionals within the library and information science (LIS) sector (Booth, 2002; Crumley & Kourogianakis, 2002; Eldredge, 2000). Simply stated, EBP refers to the process of using formal research skills and methods to assist in decision making and establishing best practice. In 2001 the Centre for Information Research was commissioned by the Chartered Institute of Library and Information Professionals (CILIP) to conduct an examination into the research landscape for the LIS sector in the United Kingdom. The examination concluded, “research should be promoted as a valuable professional activity for practitioners to engage in” (McNicol & Nankivell, 2001, p. 82).

## **2. Problem statement**

Whilst numerous studies have been undertaken under the guise of being evidence-based, very few LIS studies have empirically explored EBP as the object or phenomenon of study. Consequently, while there is a growing understanding of why EBP should be part of the LIS professionals’ practice, very little is known regarding how EBP is understood or experienced by LIS professionals. This is an important information gap to be filled in order to “firmly establish an evidence-based culture in our profession so that the profession itself truly has a future” (Partridge & Hallam, 2005). Glynn (2006) suggests EBP “still has a way to go before it is practised regularly and systematically” (p. 2). What is clear from the professional discourse is that research is needed to understand how LIS practitioners experience or understand EBP within the context of their day to day professional work. This study meets that need by examining how LIS professionals within the academic library context, actually experience EBP in their professional work.

## **3. Literature review**

Evidence-based practice consists of a systematic and structured process for identifying, acquiring, appraising, and applying evidence in making decisions in professional

practice. The evidence-based practice movement grew from a need for effective health care, most notably in the United Kingdom, and gained traction in the 1990s in government policy. Evidence-based practice was shaped by social evolutions of transparency and accountability in making informed, value for money decisions (Brice & Hill, 2004). Since then, EBP has broadened its application to other areas such as education, social sciences, crime and justice, and, over the last 15 years, library and information practice (Brice & Hill, 2004).

### *3.1. A decision-making framework for library and information professional practice*

The current evidence-based library and information practice model is founded on a conceptual re-modelling of the decision making framework from evidence-based medicine and health librarianship (Todd, 2006). Eldredge (2000) proposes the first framework for evidence-based practice and posits that evidence-based practice “seeks to improve library practice by utilising the best available evidence combined with a pragmatic perspective developed from working experiences” (p. 291). An early definition of evidence-based practice from Booth (2002) builds on this framework by providing an outline of the process, including types of evidence and its role in making improvement to practice or “professional judgments” (p. 53).

Literature discussion about a process for evidence-based library and information practice initially popularised Booth’s (2007) 5A’s model – ask, acquire, appraise, apply, and assess. The first step, Ask, is largely the focus of this discussion, as asking the right questions and formulating and answering questions requires using professional knowledge, or “librarian observed” evidence (Booth 2004, p. 62).

Todd (2009) begins to acknowledge the role of professional knowledge in the evidence-based practice process, presenting a holistic approach to evidence-based practice in the school library context. “Evidence in practice” is the “transformational dimension” in Todd’s (2009, p. 89) conceptual model that is about integrating available research evidence

with professional knowledge, while also engaging with locally derived evidence to identify issues, needs, and opportunities to actively contribute to the student learning goals of the school. From conceptual foundations, the evidence-based practice movement has established the means through which library and information practice can be continuously improved. Yet their direct application to professional practice remains unrealised as the current evidence-based practice model is insufficient in recognising the complexities of the working environment and how decision making and problem solving is approached in these settings. What actually happens in the professional context, or the process that sees evidence identified, acquired, appraised and applied to library and information practice is the least understood in evidence-based library and information practice literature.

### *3.2. Evidence-based library and information practice in context*

While there is research literature that describe case studies of applying evidence-based practice in an organizational setting, few studies have derived an empirical basis for how library and information professionals conceive and experience evidence-based practice as the object of study (Bayley, Ferrell & McKinnell, 2009). A pilot study by Partridge, Edwards, and Thorpe (2010) was the first study to explore variations in how evidence-based practice was experienced by nine Australian library and information professionals from across library sectors, including academic libraries (Partridge et al., 2010). Partridge et al. (2010) used a phenomenographic approach to categorise critical variation in the experience of evidence-based practice:

1. Evidence-based practice is experienced as not relevant.
2. Evidence-based practice is experienced as learning from published research.
3. Evidence-based practice is experienced as service improvement.
4. Evidence-based practice is experienced as a way of being.
5. Evidence-based practice is experienced as a weapon.

Experiences of evidence-based practice are described in relation to the internal and external work environment, the role of both the professional and the evidence in decision making, and how and why evidence is used in practice. The research suggests experiences of evidence-based practice by library and information professionals are “complex and multi-dimensional”, characterised by factors in the work environment that influence the approach taken to gather and use evidence for decision making (Partridge et al., 2010, p. 294). Variation in the character of the experience indicates implementation of an evidence-based approach to decision making may be unique to the professional context or sector.

Australian studies in school librarianship provide insight into the nature of evidence-based practice within the broader professional context of education. Conceptually, Todd (2009, p. 89) describes “evidence of practice” as used together with research and professional knowledge to identify learning needs and gaps, and to make decisions about the improvement of school library practices. Todd (2003) found school-librarians used tools such as checklists and feedback strategies to gather evidence from their practice. Also, the value of evidence-based practice was found to be experienced locally, within the school or organisation in which the school library was situated.

Exploring experiences of being an evidence-based practitioner, Gillespie (2014) found an iterative, holistic approach by teacher-librarians, suggesting evidence-based practice is not a step-by-step, linear process. In experiencing evidence-based practice, evidence may be purposefully engaged with or sought after, or it can be encountered as a serendipitous event or activity (Gillespie, 2014). Critical characteristics of teacher-librarians as evidence-based practitioners are “intuitive” and “reflective”, aiding the application of evidence to improve practice (Gillespie, 2014, p. 16). Gillespie (2014, p. 17) also reports that the actions of gathering and using evidence in practice do not occur in isolation, but are “entwined” and

“tangled”. For teacher-librarians in Gillespie’s (2014) study, evidence based practice can be guided by the practitioner’s own knowledge to actively engage in evidence.

School librarianship is not unlike the professional context of academic libraries, as their services also contribute towards university goals and outcomes. Findings from Koufogiannakis’ study of academic librarians in Canada found that where individual decisions are being made, evidence-based practice begins with instincts or initial thoughts and reflecting on what is already known (Koufogiannakis, 2013a, p. 10; see also, Gillespie, 2014, p. 34). Then, with evidence that is received or gathered, including research, locally derived evidence, or another’s opinion, the practitioner can confirm and better understand the problem in order to feel more confident in the decision (Koufogiannakis, 2013a). Both Koufogiannakis (2012 and 2013a) and Gillespie (2014) found that different types of evidence are gathered and used in combination to make decisions and improvements in practice.

Making decisions in the professional context, particularly those that have a high impact on the provision of information services is found to influence academic librarians’ experiences of evidence-based practice. Koufogiannakis’ (2013) study reveals that evidence is used differently in the work environment depending on how and who is making the final decision. Firstly, academic librarians tend to work together in groups—an observation that Koufogiannakis says may be transferred to other sectors (2013b). Secondly, for the most part, another stakeholder usually makes or has final approval of significant decisions which impact service (Koufogiannakis, 2013b).

Research to date provides insight into the knowledge gaps that remain in understanding evidence-based practice in the library and information profession. Most notably, a gap still exists in how library and information professionals experience evidence-based practice in their day-to-day work. This gap includes all facets of the evidence-based practice process – how library and information professionals identify the need for, recognize,

gather (or encounter) evidence, and how different types of evidence are appraised and applied to inform decisions and practice. While similarities exist across library and information practice, empirical findings suggest that experiences are ultimately characterised by factors unique to the professional and organisational context, such as needs, priorities, processes, and expectations (Partridge et al., 2010). The current conceptual model is only as effective as it is understood and experienced in professional practice. This research seeks to understand and fill this knowledge gap from an empirical basis. Understanding evidence-based library and information professionals from the practitioner's perspective is important in enabling evidence-based practice to be fully embraced in improving practice and making effective, value-add decisions about library and information services.

#### **4. Methodology**

The purpose of this study was to explore and understand the ways people experience a particular phenomenon (i.e. evidence-based practice). Central to the study's purpose is the concept of life-world, which refers to "the world of immediate experience", or "the existent world as we find ourselves in it" (Adams & van Mansen, 2008, p. 617). In attending to the idea of the life-world, interest is placed on understanding the inter-subjective world of human experience, which comprises people's thoughts and actions, along with the social manifestation of these (Schwandt, 2007).

This study employed constructivist grounded theory methodology (Charmaz, 2006) to explore the experience of evidence-based practice within the academic library context. The rationale behind grounded theory was that theory should be grounded in empirical evidence, that is, evolve from data rather than be developed a priori and then tested. Constructivist grounded theory emphasises personal, subjective making of meaning or construction of reality. The following paragraphs outline the process of how the theoretical model was developed using constructivist grounded theory.

The participants were thirteen academic librarians recruited from Queensland universities, employed in various roles ranging from liaison, reference, and information librarians to library executive team managers and directors. Participants were recruited and selected via a purposive sampling approach and were contacted directly by email. Participants were identified through publically available information that is provided on University library websites about staffing or organizational structures.

Participants each took part in a 30-60 minute semi-structured interview. The interview questions were designed to allow participants to explain their process and experience of evidence-based practice. The interviews were conversational in nature allowing co-construction of knowledge between the participant and the interviewing researcher. Interviews began with the following main question: *Can you tell me about your experience in using evidence in your professional practice?* This question was designed to allow the participants to respond without constraint and for a dialogue to be established between them and the interviewer. Probing questions were used to explore the participant's responses and experience, these included *Could you explain that further? Could you tell me more about that? Could you give me an example?*

The number of participants was influenced by the grounded theory position on saturation (Charmaz, 2006). Constructivist grounded theory's data generation process involves reaching theoretical saturation through diversity of data generated from a minimum of ten participants. Saturation is reached when no new concepts can be constructed from the data.

Initial line-by-line coding of interview transcripts and memos was carried out, and from these coded transcripts early categories were developed. Data analysis in the focused-coding phase targeted key processes or action verbs (Charmaz, 2006) and these became processes and sub-processes within the six major categories. The majority of open or focused coding and model development was carried out manually using tables in a word processor for



engaging with the constant comparison technique towards developing the theoretical model of academic librarians' evidence-based practice experiences.

## **5. Findings**

The findings provide a holistic mode of academic librarians' experience of evidence-based practice. Six categories of experience were constructed through a constructivist grounded theory analysis process. These categories are: Empowering; Intuiting; Affirming; Connecting; Noticing; and, Impacting. Together these six categories represent a substantive grounded theory or model that explains the nature of academic librarians' experiences of evidence-based practice. The theory describes academic librarians' experience of evidence-based practice as a complex and highly contextualised phenomenon. There is no clear relationship between these categories as the data analysis did not generate a specific order or hierarchy of dimensions or categories.

### **5. 1 Empowering**

Academic librarians describe their empowering experience of evidence-based practice in terms of both:

- 1) *being empowered* by clients, colleagues and institutions through improved practice or performance; and
- 2) *empowering* clients, colleagues and institutions through improved practice or performance.

Librarians in this study discussed having mutually empowering experiences of building self-confidence as competent practitioners, and building the confidence of the people they work with and serve. In this study, in relation to the empowering experience, evidence-based practice is experienced as interacting with anything (or anyone) that is perceived as an indicator of improved or good practice or performance. An academic liaison librarian reflects on this experience as follows:

I judge how I'm going by my interaction with the team, so if that's healthy, I'm meeting my deadlines...the quantity of my output...if I get that occasional thank you from a researcher or a good class evaluation...I'm fairly confident that...I'm earning my wage at least (Participant 6).

From a senior level librarian's perspective the empowering experience is more about enabling colleagues to build capacity across the University library:

I think it's important for them to collect...for them to be aware of what evidence they're going to need to support how they're performing...because they're required to do it and you're building on it and getting people to share practice in meetings because it's required, then you start getting sharing and building of capacity in that evidence-based approach to what they're doing (Participant 10).

In this category, evidence can be stored and gathered physically (i.e., document or email as proof of a positive outcome):

A lot of people will write back an email to say oh thanks you're a legend you found that...'cause you might of put a lot of time and energy into finding something difficult to find...you feel a sense of satisfaction yourself and they are just so thrilled (Participant 9).

Evidence can also be stored and gathered mentally (i.e., memories or knowledge of an interaction with a positive outcome). For example, being involved in new projects and collaborating closely with clients such as discipline-specific researchers can be a mutually empowering experience for both librarians and their clients:

We have to really understand...their area of study and have some insights into it and something to contribute. We have to speak the same language...that research is ultimately going to inform the type of service model that you're providing around that research support role...huge project...but it's very exciting (Participant 7).

Building capacity both within workplaces and across universities is experienced in a number of ways including staying connected to the work of other departmental teams outside of the library and so contributing to an overall sense of confidence in “know[ing] that everyone’s doing their job well, or they’re all concentrating on a particular project at the moment, so you feel confident in knowing what’s going on...not just within your team” (Participant 1). Librarians at a senior level more often experience capacity building through evidence-based decision making for staff across university libraries:

Then there’s decision-making that we do around our work in teaching and learning...it’s something that I am personally working quite hard to gradually build capacity in across [University] Library not just in our own branch...So we’ve got a strategy whereby everybody has to...go here’s a teaching event that I’m going to do...what I think the issues might be...talking to people...or needing some literature beforehand (Participant 10).

In some cases, librarians also experience evidence-based practice as identifying areas needing improvement (both personally and in the workplace), so that both negative and positive experiences can be used for learning and empowerment. Some librarians experience barriers to empowerment, mainly related to restructure, unclear expectations, or directions for performance reviews:

[Participant 2, while] driven by the researchers’ needs [as a priority], would really like to have some kind of document...which would give us more of a framework of which things to prioritise in providing research support, because the number of things that I could do is just enormous...I feel that we’re still trying to clarify that within the library context.

## *5.2 Intuiting*

Academic librarians describe their intuiting experience of evidence-based practice in terms of both:

- 1) *being intuitive* to understand colleagues, clients and institutions; and
- 2) *using own intuition, wisdom and understanding* of library staff and clients' behaviours to solve problems and re-design services.

Librarians in this study described evidence-based practice as drawing upon intuitive forms of evidence to inform their practice. This is often described an emotional experience of being intuitive or learning to use one's own intuition during professional practice such as problem solving, as the following senior level academic librarian expressed in relating how she used her intuitive understanding of staff under her supervision:

I've learnt to trust my gut, and...I've learnt not to be scared to invite someone into the office and say "are you alright?", and they're like "oh you know what, no I'm not"...I just try and allow them to just get it out and be alright...but I think the biggest thing is...I just try and step back and 'cause I've had some micro managers...they're not being paid the minimum wage, they are smart people and often if they're struggling they'll talk to each other and then if it gets to the point where they need more input they'll come to me (Participant 11).

Intuitive evidence is often described as "evidence in one's head" and as a "learning process" that can be either conscious (when verbalised) or sub-conscious (when experienced but not yet verbalised). The following quote from a liaison librarian encapsulates the experience of *being intuitive* as an evidence-based practice:

It's constant learning...I feel like I don't have a lot to say about evidence, at this stage, because we're still in an experimental phase, but I guess there's a lot of evidence in my head that's hard to sort of verbalise...through my learning process, I can see, well, that worked, that didn't work...it's not even a fully conscious process, but just keep adapting...it's often funny how in a presentation, or in a meeting, something that you read last year, or last month...just comes back to you, and so you use that as part of

the conversation...it's a very broad sort of knowledge base to have, to talk with researchers at all career stages, locations, and disciplines (Participant 2).

The last quote also touches on using intuitive empathy for clients (i.e. researchers). In some cases, being able to understand clients' behaviours, beliefs, and needs over a period of time can be experienced as evidence-based practice (despite potential barriers regarding the practical aspects of the academic library context):

I think it's a case where it's hard because it's emotional for the academics. They have a belief about how the information is being used based on probably a number of years ago and how they were taught and how they learnt about things and how they interacted with that information...it's emotional. I understand, I mean I adore maps so I understand the emotion, but yeah I love print maps I completely get people's love of print maps. I understand the emotion but there's no place for it in the current academic library context that we work in. But it's that very practical side of things. So that's an example where the partnership can come in because it's like but they know you so well and they're pleading with you (Participant 10).

Another librarian who teaches information literacy classes described the experience of knowing she is teaching effectively:

Sometimes it's more of a perception or an intuition you know when you're teaching a class and you can see the students you can just see the light go on in their eyes like when they get it, and it's like what you call an aha moment or a light bulb moment....Many times you can just visually see it, you can just experience it with them, you know they've understood and they've comprehended and they've grasped that idea, so that's very rewarding instantly (Participant 9).

### *5.3 Affirming*

Academic librarians describe their affirming experience of evidence-based practice in terms of both:

- 1) *being affirmed* through receiving and sharing feedback; and
- 2) *using affirmation* to strengthen support for action.

Librarians in this study discussed affirming action as a way of experiencing evidence-based practice. In this sense, evidence is the corroboration of supportive feedback received and shared by colleagues, clients, and institutions, while evidence-based practice is experienced as being affirmed by various stakeholders or resources, and is also experienced as using affirmation to strengthen support for action and as an indicator of effective performance, as the following quote suggests:

I think I'm performing...effectively when my colleagues give me positive feedback or include me in...can you join this thing because your input is important or we value your input. I think managers can give you...lots of positive reinforcement about where you're going or...your role...my manager for the library he technically manages me, comes in and visits the professor...and then they come back and tell me if he's happy, which basically he is that's all right...I think it's that 360 thing...you get it from all directions (Participant 8).

Being affirmed and using affirmation or support from one's own team is often experienced simultaneously, resulting in the feeling of having a good plan that meets clients' needs:

Primary means [of evidence] would be from my manager and also my colleagues. We are quite supportive of each other and we always discuss...if we're trying out something new...we sort of bounce ideas off each other, and I think in that way you feel like what it is you're going to plan to do...you've worked it out to be a good idea

and hopefully it meets the needs of the staff and students for the faculty (Participant 1).

The perspective of Participant 1 also suggests the experience of collegiality as a form of being affirmed and feeling morally supported to persevere through tough times:

[I]f you've written a guide...and they look over it and say, "Wow, that's really good, I'm going to use a bit of that in my own...work,"...it's something that you're drawing on to give you a sense of, "I'm trying to do the best I can here"...It's still evidence....I think that's kind of what's held people together after the restructure because it really gutted people, and I've heard from a few of my colleagues that said, "If it wasn't for the fact that we liked working with each other, I don't think I could keep working, pretty much" (Participant 4).

#### *5.4 Connecting*

Academic librarians describe their connecting experience of evidence-based practice in terms of both:

- 1) *being connected* with clients, colleagues and institutions; and
- 2) *building connections* with clients, colleagues and institutions.

Librarians in this study experience being connected and building connections as evidence-based practice through every interaction they have, especially with clients (Participant 1). Being connected and building connections are experienced simultaneously on an individual level as librarians being social and developing good working relationships with colleagues and clients, and on an institutional level as connecting to the university and the context within which it operates as a whole:

It's the ability to get on with...all those areas that are there...maybe it's a bit social too....I think it's not just that you're a nice person or anything...it enables you to

have a big picture of where the [organisation] sees itself going...And so we're at the mercy of political means and change is always on the cards (Participant 8).

In a climate of constant change in higher education, the experience of connecting and reconnecting with clients and staff is discussed as being ever more important:

Within our next six months it's a very big refresh or revitalisation I reckon it is for us to then fall into the new structure as well...reconnecting with...people that are still there and then establishing new connections in relationships with people that suddenly become involved in our liaison area...there are a lot of very unsettled academic staff' (Participant 9).

The experience of being connected also involves librarians meeting with other library team managers which "keeps us connected to what other teams are doing" (Participant 1), and using the library newsletter to promote library services to the whole university: "I think that's a good way of knowing...that we're working well and connecting with the wider university and not just...within Library Services but everybody....you're doing things to...keep yourself connected to the...university as a whole" (Participant 1).

Building connections with clients is experienced through both formal (written) and informal (verbal) conversations with academic staff and students, where feedback is collected through listening and questioning, and can be used to enhance or change services and practices, as the following quote from a liaison librarian illustrates:

I might be...walking along a corridor, and an academic will actually...come out of their office..."Thanks...I like...the library...what service they're offering, or what you did in that class the other day,"...whereas the formal feedback might be they'll send me an email after class to say..."We hope you can continue doing...joint classes,"....it's good to seek it out and get that formal, and sometimes you don't need to, they'll just tell you informally, which is great as well. I think I like that one



better...I will go and have an appointment with a lecturer, and tell them what I know, and then I'll kind of say, "Is that okay? Is that what you're looking for?"...And if I haven't explained it well, I can tell. They'll ask me the same kind of questions again, or if I'm on the right track they might ask me...a more advanced question that...continues the conversation...you're sort of using that feedback...you're using that as evidence (Participant 3).

Other aspects of connecting with clients through conversations include maintaining confidentiality and rapport building:

I keep them quite confidential and that's been successful in that the researchers have been really grateful...say they're applying for academic promotion, I've found that that's been a really interesting time, because I've got them at their point of need, where they're very vulnerable, and very honest about what they don't know. So in other context, at other times of the year...they might not be prepared to admit that they don't know how to find their citation count...something that they think everyone else can do except them, which is absolutely not the case....so, that's been a really effective way to also build a rapport...another bit of evidence" (Participant 2).

Connections are also formed by being sensitive to researchers' preferences as indicated in their feedback. The following quote captures the experience of the evolving conversation with clients which results in an adaptation of the session delivered: "The conversation will just keep evolving, and the same within a presentation or a training session...with a group I'll adapt the session to respond to the feedback that I'm getting" (Participant 2).

### *5.5 Noticing*

Academic librarians describe their noticing experience of evidence-based practice in terms of both:

- 1) *being actively aware of, observing and reflecting* on clients, colleagues and literature within and outside of own university; and
- 2) *noticing patterns* in data to inform decision making.

Librarians in this study described the experience of noticing as being actively aware of, observing, and reflecting on the “personal experiences...had day-to-day with students”:

I still think [the day-to-day experience with a student] is extremely important...that’s why I really love getting out and working on the desk for a couple of hours every day or going into classes and...and teaching because you still pick up on ways to improve or identify...similar problems that the students are having maybe on a website or with searching or...just understanding their behaviours in regards to finding information as well. So those little things really do help me a lot. I think without that you would feel disconnected to how students are using the library (Participant 1).

Noticing library usage patterns in data is experienced as evidence-based practice—whether informally observed as described in the last quote, or formally noted through web data analytics in an everyday work context. For example, one participant described a more formal analysis of usage patterns:

During my daily tasks I noticed this. So I’ve got a library guide, which is all about how to reference in APA style, and I have a few different tabs for each of the sources that you may be referencing – so one for books, one for journal articles, websites, videos – and I was looking at the statistics for that site ’cause I really want to know how many students are actually accessing it. And it is one of the most popular library guides that we do have, which is really, really good to know that students are finding it and using it. But what I found interesting was that the most used page within that guide itself was how to reference a website, not how to reference a journal article or a book from the library, but how to actually reference a website. So that

gives...evidence to me that...although we really try to focus our...sessions on using library resources...the students are still using websites...and wanting to reference them” (Participant 1).

However, while some librarians in this study are adept at “keeping an eye on” (Participant 3) usage patterns found in quantitative data, they are uncertain about how to use this evidence once identified. One of the main experiences reported by librarians in relation to noticing is the perception that, while it is more challenging to capture mental notes for future use, qualitative data gathered from informal conversational feedback were more insightful and useful for decision making than quantitative data gathered from client surveys or databases where only numbers of interactions have been recorded (Participant 3).

On a broader level, librarians are maintaining awareness of professional literature to evaluate specific library activities and make decisions in terms of industry standards and best practices, where applicable. They also maintain awareness of scholarly literature to increase credibility of evidence presented and service contributed to university contexts (Participant 1).

### *5.6 Impacting*

Academic librarians describe their impacting experience of evidence-based practice in terms of both:

- 1) *being impactful* on clients, colleagues and institutions; and
- 2) *having a visible impact* on clients, colleagues and institutions.

Librarians in this study discuss a perceived shift in practice towards moving away from the background to become more visible or present with stakeholders, both physically and mentally—as this quote from Participant 1 encapsulates:

Getting to know the faculty was a really difficult thing because in the reference librarian position...you’re not necessarily out there trying to meet people, trying to

get known by a specific group of people...So when I came into this role...it was a bit of a challenge for me to change the way...I interacted with staff and students to make myself more known”

‘Being impactful’ is an internal experiences that involves librarians consciously making an effort to change their mindsets to increase their visibility or status in the faculty in order to be more impactful on clients, colleagues, and their institutions. For example, the experience of being impactful involves changing established ways of customer service provision to increase engagement with and make themselves more known to the faculty (e.g., proactive versus reactive interactions and communication methods):

I started visiting the faculty at least once a week and being in the actual building itself and letting staff know that I’m there to talk about...research help, or database enquiries, or things that they want to be in the collections. So I was really in their space and there for them to approach. And I also started...a couple of blogs going for...communicating for people that didn’t...always come to you when they needed help...the two things that stand out now that I instinctively did, because I knew it would be more for myself, to make myself feel comfortable when I did approach the faculty and...did engage with them, and it turned out to be...a really helpful thing when it came to reviewing my (performance development) (Participant 1).

Being impactful as a mindset, as expressed by Participant 1 in the former quote, is also experienced as being an enabler to gather evidence (e.g., the visible impact of improved class results or research output) for reviewing performance development.

Having a visible impact is experienced as feeling a sense of satisfaction through seeing one’s own positive contribution making a difference to academics’ work. This can be through various forms of evidence such as anecdotal feedback or comments expressing

genuine understanding and appreciation, public recognition such as award nominations, or analysis of quantitative and qualitative data to measure their “impact factor”:

“[We were]...looking at the way we taught information literacy...we sent out a pre-quiz, we did some classes with the students then we did a post-quiz and engaged the results both quantitatively and qualitatively...just to try and gauge that impact factor...get some evidence” (Participant 9).

## **6. Discussion**

Findings from this research build upon and expand the current understanding of the experiences identified in the previous study by Partridge et al. (2010), particularly the “ways of being”, in that each of the six experiences of evidence-based practice by academic librarians are both ways of being (mindset) and ways of doing (action). These experiences also reflect recent findings on the intuitive, non-linear nature of evidence-based practice and decision making (Gillespie, 2014; Koufogiannakis, 2013a) and the collaborative or shared interactions within staff teams and across institutions associated with evidence-based practice in academic libraries (Koufogiannakis, 2013a).

Additionally, the model developed from this study has highlighted a stronger client focus throughout each of the six experiences. This is particularly apparent in the empowering, connecting, and impacting experiences where the mutual interactions between librarians with clients (academics, students, and the broader university and higher education context) are regarded as essential evidence to be used in professional decision making and academic library leadership.

This theoretical model can increase the current awareness of the various experiences of evidence-based practice. The model illuminates what is regarded as evidence, how it is used, and how evidence-based practice actually happens in terms of mental, emotional, and physical experiences in a workplace setting.

This paper presents the findings from a study that explored the lived experiences of Australian academic librarians at a particular point in time. In doing so the study has provided new insights into the realities of evidence-based practice as understood, experienced and enacted for one group of library and information professionals. More research is needed to further develop our understandings of how evidence-based practice is actually understood and experienced by library and information professionals in different contexts and over a longer period of time.

## **7. Conclusion**

The research presented here is one of a small but growing number of studies that have begun to establish an empirical basis for evidence-based practice in the library and information profession. The findings of this study have the potential to assist library educators, associations, and others involved in the supporting, preparing, and educating of LIS professionals at every career stage to develop the skills, knowledge, mindsets, and actions needed to facilitate and advance evidence-based practice. The findings can also help inform the design of professional development programs and workshops in evidence-based library and information practice, leadership in academic libraries and more broadly, leadership within the information sector.

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